



CT

275

S 452

B3

893



LIBRARY OF CONGRESS.

Chap. CT 275

Shelf S453 B3

1893

UNITED STATES OF AMERICA.

BENJAMIN FRANKLIN SHAW.

AN OUTLINE.

"O, what hadst thou to do with cruel Death,
Who wast so full of life, or Death with thee,
That thou shouldst die before thou hadst grown old?"

BY HIS SON,

RALPH H. SHAW.

*Read before the Old Residents' Historical Association,
November 18, 1892.*

LOWELL, MASS.
LOWELL COURIER PUBLISHING CO.
1893.

BENJAMIN FRANKLIN SHAW.

AN OUTLINE.

BY HIS SON

RALPH H. SHAW.

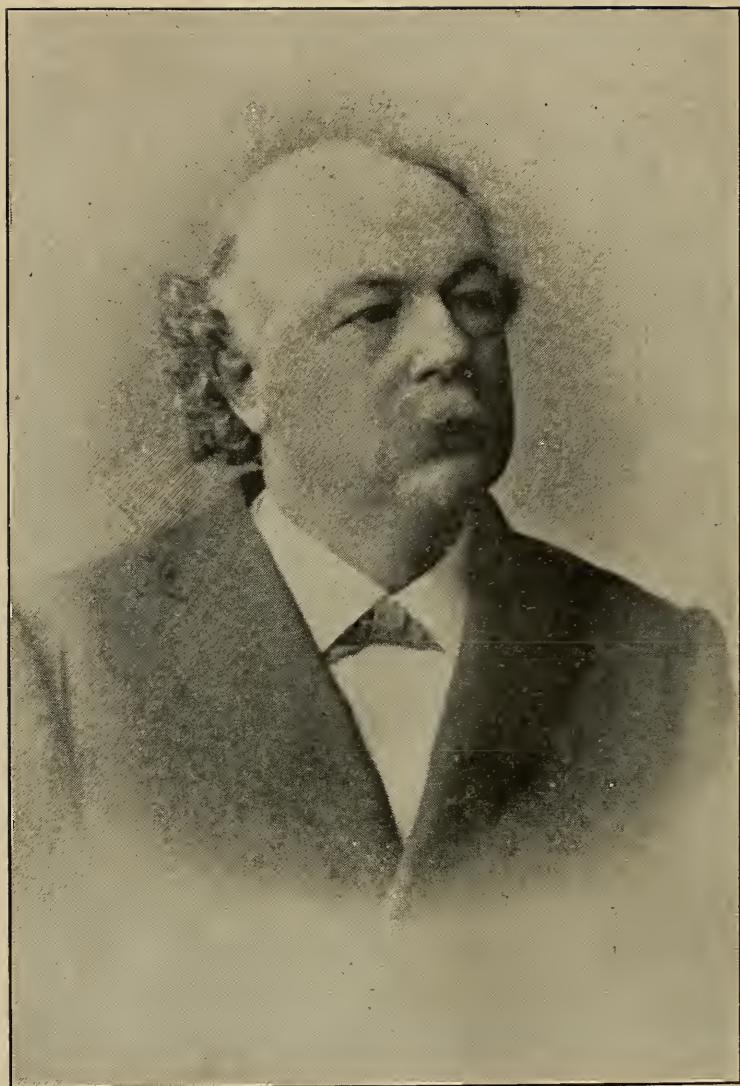
B2

*Read before the Old Residents' Historical Association,
November 18, 1892.*



LOWELL, MASS.
LOWELL COURIER PUBLISHING CO.
1893.

CT275
5453 B3
1893



Reyn. F. Shaw

P.V.S. Oct. 7-20

*Benjamin Franklin Shaw; an Outline. By Ralph H.
Shaw. Read November 18, 1892.*

[Copyrighted, 1892.]

BENJAMIN FRANKLIN SHAW, my father, was born at Monmouth, Maine, on the twenty-second of November, 1832. His ancestors, at the remotest period reached by his genealogy, were Scotch, and he was a lineal descendant of Roger Shaw, who settled at Hampton, New Hampshire, in 1647, and who was several times the Hampton Deputy. I remember how my father laughed when he told me that this ancestor, as the Hampton Vintner or Keeper of the Ordinary, was authorized to sell intoxicating liquors to Christians, but not to Indians, except when, according to his judgment, it should "seem meet and necessary for their relief in just and urgent occasions."

His sentiments in regard to this ancestor, and to his ancestors in general, were very well expressed in the following letter, written in 1882:

My Benefactor—It was a kind act of yours, and one gracefully done, to spend so many hours in making me acquainted with the names and places of abode of my ancestors. The oblivion of a dim past—and I have often supposed it might be the charity of oblivion—had, until you undertook to peer into it, quite concealed from me whatever evidence of their existence the generations of Shaws anterior to that of Joseph, whose will was executed in 1743, left behind. I can hardly express the pleasure your clearing the obscurity gives me.

Though each of my predecessors was as humble in station as I am, it is agreeable to one who somewhat loves and venerates ancestry to have so simple a fact as that definitely fixed, for we could hardly feel a certainty of that were not the chain viewed as so many links—each having individuality, or that degree of peculiarity a fond imagination draws from the names, dates, offspring, etc., etc., and throws around the figures of his people gone before, which makes so interesting the contemplation of them.

To the name “Roger”—a name which to me indicates a genial austerity—you have added the record of his connection with wine, Indians, and spirits, and the implied fact that he, perhaps alone of his fellowmen, could be trusted to sell rum. What moral integrity, purity, holiness was that in him which sanctified him to that high office! He was a man, doubtless, who would not put to his neighbor’s lips a cup his own should not taste; and, if there was only one cup, he was, we may feel assured, a man who would see that his neighbor partook only sparingly of it.

Whether my father was proud of his connection with Roger Shaw, or not, he must have regarded with some satisfaction the fact that among his ancestors, though remotely, were natives of Scotland. It pleased him once to say that “Watt, a Scotchman, made useful the steam engine, and that is enough for one country to be proud of. Still, in metaphysics, history, and works of imagination and poetry, Scotland has produced eminent men.”

At the time of my father’s birth, and for years after, his father, Moses Shaw, a skilful mechanic, carpenter, and builder, was in poor circumstances, owing to the dulness of the times; and the house in which my father was born was a very rude one—not so good as the typical New England farm-house of its day. He told me that on many a stormy night in winter the snow blew through the crevices in its walls and fell on his bed. Monmouth, during his boyhood, was a woodsy, lonesome town, and its houses were “few and far between.” Whatever may have

been its charms in summer, it was dreary enough in winter, and I shall never forget the picture he presented to my mind when he told me that here, as a little boy, he would sometimes lie awake at night to hear the barking of wolves in the distance and the ticking of the old-fashioned clock in his room. "How comforting," he added, "was the ticking of that clock! It assured me that I was safe at home."*

In 1841 he went with his parents to live at Topsham, Maine. Though the years were few that he passed at Monmouth after he had become old enough to receive impressions or to be affected by his surroundings, he often thought of the picturesque old town, and delighted to describe it. In a letter written in the last year of his life, in acknowledgment of an editorial notice, he said, "I am glad you mentioned my birthplace, Monmouth. Towns have turned out sons of infinitely greater ability to make names for themselves; but no birthplace ever inspired greater love than that I bear for the old farm in Monmouth, near the head of Winthrop Pond."

Soon after his folks had settled in Topsham, a quiet old town on the Androscoggin, he began to realize that life imposes burdens and makes demands that must be met. He was obliged to work whenever there was work that he could do, even if it interfered with his attendance at school. When he was ten years of age he was sent to Bowdoinham to do light work on a farm. He went in seed-time and remained until harvest, receiving for his services, in addition to his board, the stupendous sum of nine dollars. He had worked about four and a half

* When he was eight or nine years of age he built a little up-and-down saw-mill on the side of a brook that ran through a pasture in this town. He dammed the brook for power; had a tin saw about six inches long, and borrowed long red potatoes for "logs," and sawed them into "boards."

months for it! When he was twelve years of age he was employed during the winter in a match factory on Shad Island, receiving matches in the spring in return for his work! But matches were looked upon as a luxury then, and those received by him, if they were not sold, must have been very economically used by his parents. He managed, however, to attend the district school at Topsham during its winter sessions, with few interruptions, until he was fifteen years of age, when he was sent to Saco, Maine, to earn what he could as a clerk for a dealer in dry goods. Here he remained two years, returning to Topsham in 1849. This dealer, who came to Lowell to see him some years before he died, told me that he made a very successful clerk, and that his intelligence and gentlemanly manners were remarked by everybody that met him.

On returning to Topsham he assisted his father during one summer at house-building, and learned enough of carpentry in one way and another to be able to say that he had nearly mastered a trade.* But he found he was not rugged enough to be a carpenter, and, wanting to "get knowledge, get understanding," and living almost in the shadow of Topsham Academy, he wished he could attend that institution, but the circumstances of his parents were such he did not see how he could. He comforted himself a while with the thought that a person can teach himself something, and had a room in his father's house set apart for a study, and borrowed books from a neighbor. In this room he pored over these books night after night, adding much to the store of his knowledge; but it was natural that the more he learned the more he wanted

* At this time, when the work of the day was done, he employed the moments at his disposal in constructing a suction hose fire-engine (small seals), showing much ingenuity.

to learn, and he looked again with longing eyes at Topsham Academy — and not in vain: he was told, by some one having influence at the academy, that he might have tuition there during the winter, free of cost, if he would ring the bell, build the fires, and sweep the floors. He at once promised to do this work, not caring for the humiliation which his sensitive nature would be sure to feel. He rang the bell, built the fires, and swept the floors, and may have been looked upon as a menial by some of the other pupils. No matter! — though he rang the bell, built the fires, and swept the floors, he stood at the head of his class, and his teachers told his parents, time and again, that they “had never caught him with a poor lesson, though they had never found him studying very hard.” He was quick to comprehend, and his memory was good. At the end of the term he had learned all there was to be learned at the academy; but he was not satisfied, and expressed a desire to go to college, especially to Bowdoin College, which was not far away.

His uncommon intelligence and capacity for learning had so favorably impressed his neighbor, Rev. Dr. Wheeler — who had lent him books and given him access to an excellent library — that this scholarly gentleman, on hearing of his desire to go to college, told his parents that he would bear the expense of his tuition if they would let him go. But his parents felt compelled to say that their family was a large one, and that he must contribute what he could to its support. He knew that he could do very little, if anything, in this direction, if at college, and, sorrowfully giving up the hope of receiving a polite education, went to work for a bookseller in Brunswick, Maine, in whose employ he remained until late in 1850, when fortune favored him a little, and he was engaged to keep the books of a prosperous dealer in lum-

ber at Gardiner, Maine, whither he went with a light heart, wearing the first full suit of good clothes that he ever had. He was now eighteen years of age.

“TOILING UPWARD IN THE NIGHT.”

I know very little about my father's life at Gardiner, but he worked diligently, and gave a portion of his earnings to his parents. He was married here, January 20, 1853, to Harriet Nowell Howard, who was born at Haverhill, Massachusetts, and whom he had met in Topsham in 1852 and earlier. He had given so much satisfaction to his employers here that late in 1853, when he was twenty-one years of age, they sent him to act as their agent in a sash and blind business at Philadelphia. Either this sash and blind business did not pay well, or he wearied of it, for in the fall of 1854 he quitted it as its creditor, and was in the City of Brotherly Love with nothing to do, and almost a stranger. But it was not long before he found employment and entered the office of the publishers, Lippincott, Grambo & Co., now the J. B. Lippincott Co., beginning his work here as an under-clerk, but showing so much ability that he was soon promoted, and in a few years given general charge of all the clerical work and paid a handsome salary.

In 1859, when he was twenty-seven years of age, he built a beautiful villa in Fisher's Lane, Germantown, now part of Philadelphia, employing his father and younger brothers to do the work. There were now prosperous days ; but “the haunting dream of better” would not suffer him to be content. He did not want to do clerical work all his life ; but what he should do to get away from “the desk” and better his circumstances he did not know. He had invented a number of useful things,

including an inkstand, which I am now using, a penholder, and, I am told, a letter-press ; but he had been too busy in the discharge of his duties at the office to turn any of these devices to account. What should he do ? It was hard to say ; but casting about, as it were, he found there was need of improvement in the text-books used for primary instruction in geography, and he believed that he could supply it, though he knew he could do nothing to this end during the day-time. He went to work, burned his taper, and in 1862 issued his *Primary Geography* on the basis of the object method of instruction ; illustrated with numerous engravings and pictorial maps. This excellent work was highly commented upon by eminent educators, and introduced into many of the schools in Pennsylvania and western states. The testimonial of Epes Sargent, one of many equally good, presents the merits of this work so much better than could any words of mine that I will insert it here :

The author evinces in his novel work a familiarity with the best modes of instruction, practical knowledge of the art of teaching, and correct judgment as to the best means by which the pupil's reasoning powers may be developed.

The book captivates by its illustrations and pictorial maps, and satisfies by its easy, logical arrangement, appropriate subject-matter, and the broad scope it gives to thought. Not confining the attention to dry details in technical terms, it interests, instructs, and stimulates by the pleasing and important information by which it is diversified.

The idea of indicating climatic conditions, and of showing the mutual adaptation of things to places by means of pictorial illustrations and textual descriptions, is too good to be passed without remark ; while the excellence of the plan is so obvious that mention seems to be almost superfluous.

He was not publicly known as the author of this work. It bore the name of Fordyce A. Allen, principal

of the Chester County Normal School, West Chester, Pennsylvania. The reason will be obvious, doubtless. The author, who could boast of no higher *Alma Mater*, if he ever regarded it as such, than the academy at Topsham, and who was very nearly self-taught, had not gained a reputation in any department of educational work. On the other hand, the gentleman whose name was used was widely known as a person of "accurate scholarship," who had been for fifteen years an educator, and had been connected with county institutes in every section of Pennsylvania, as well as in other states.

Encouraged by the reception that this work met with, its author began the compilation of his Comprehensive Geography, combining mathematical, physical, and political geography, with important historical facts; designed to promote the normal growth of the intellect. This important work, characterized as "original and progressive," was published in 1864, when he was only thirty-two years of age, and was as well received by educators as the Primary Geography had been, and as widely introduced. One of its most pleasing, peculiar features was the exhibition in its physical maps of the marked elevations and depressions in the surface of the earth, by means of nice gradations of light and shade.

I shall not undertake to describe this accurate and thorough work; but to give some idea of its comprehensiveness, and the labor involved in its compilation, I will present a portion of its preface:

The Primary Geography, the first book of the series, begins with the pupil himself, and invites his attention to such works of nature and art as may be seen around his home. Gradually extending the view, it places before him, part after part, our own country, then, one by one, other lands, until he obtains a glimpse of the whole earth.

This work, the second of the series, considers in its entirety the earth thus put together; afterwards the several natural and political divisions of its surface.

Thus the scholar ascends from the study of the several parts to the contemplation of the whole. Then, separating the mass, he examines closely each of its divisions.

Although the general plan of the book is analytic and comparative, the subjects are, for the most part, treated inductively; since it is not expected that the learner will comprehend effects until their causes have been made known to him.

The combination of natural and civil history with the commonly recognized branches of geography has afforded an opportunity to bring out in an unobtrusive manner many of the important principles and minor facts pertaining to the subject.

The early animals whose remains in museums are objects of curiosity; the vegetation to which we trace the coal formations; the later plants and the higher animals, including man; the great empires of antiquity; the theories of the ancients concerning the earth; the results of modern investigations; the political divisions of the present day; — these are spoken of in their natural order.

This chronological arrangement facilitates the elucidation of the mathematical part of the study. It enables the pupil to see the earth as the ancients saw it; to change his ideas as mankind changed theirs; and to regard the terrestrial mass as men regard it now. Instead of exhibiting the globe at the outset, it assists the reasoning powers in slowly forming into a round body the apparently flat expanse of land and water.

This was a great work; was it not a remarkably great work considered with respect to the age, the limited schooling, and early circumstances of its author? It was compiled, as the *Primary Geography* had been, at night, and for nearly three years kept its author from his bed until two or three o'clock in the morning and nearly made a recluse of him, for it prevented his participation in any social event or pleasure. It was put forth as the work of Benjamin F. Shaw and Fordyce A. Allen. Professor Allen did nothing in its production further than to make

some suggestions as to what its general arrangement would better be. This statement is confirmed by a letter from Professor Allen to my father dated November 6, 1864. In this letter, following the averment that "whenever and wherever opportunity has presented itself, I have always spoken of the work as being chiefly your own and the result of your own labors," occur these interesting words :

You are struggling to get a reputation in the literary and educational field with the odds seemingly against you. Your position has been such that it was hard to make the start. But you are standing upon a solid basis, upon a foundation laid by yourself, every stone of which you have quarried, hewed, and laid with your own hands. In short, you are coming into the field with real merit.

"INTO EACH LIFE SOME RAIN MUST FALL."

Early in 1865, finding that protracted night work had so impaired his health as to make it imperative that he should have more out-door air and exercise, and having conceived the idea of cattle-raising in the far West, he resigned his lucrative position at the counting-house to engage in this business, and, in company with a New Hampshire school-master, whom he had known for years, purchased government claims in Kansas. Whereupon he sold his home in Fisher's Lane, and moved his family to South Danvers, Massachusetts, having bought the Captain Lowe estate in that town, locally well-known, and at that time possessing many attractions.

Here he left his wife and little ones and departed with the school-master for Salina, then a frontier hamlet, to enter a business for which he had, it seems to me, no natural qualifications. For a while the business proceeded smoothly and encouragingly; but it was not long

before he found that the school-master was unscrupulous—that he not only pretended to forget the promises he had made, but appropriated to himself funds belonging to the company; the atmosphere of Kansas, the presence of savages and more savage outlaws, the sight of tomahawks and bowie knives, and, for all I know, the use thereof, seem to have demoralized him. The discovery of this moral crookedness on the part of the school-master, together with the loss of hay burned by Indians and of cattle dying from the cold of an uncommonly severe winter, put an end to the business of cattle-raising, and early in 1866 my father returned to the bosom of his family, barely escaping the wilds of the West with his life, not so well off in purse, but very much better off in health.

Directly after his return he accepted the position of general manager of the outside operations and investments of Dr. J. C. Ayer & Co., Lowell, Massachusetts, which he held until the summer of 1868, continuing to reside at South Danvers. To most men the discharge of the duties of this important position would have been work enough; but, in addition to it, he invented a seamless stocking and an automatic loom for its production, which involved a radical departure from any method of making stockings that had been known, and which, as perfected by him some years later, raised him to the distinction he enjoyed as an inventor. They were suggested to him in the autumn of 1865. "I was then," he once said, "away down on the southwest borders of Arkansas and Missouri. One night while driving cattle I was pursued by rebel bushwhackers and forced to swim the Osage River. I escaped my pursuers. While drying my clothes by the cabin fire I noticed for the first time the remarkable similarity between the heel and toe of a

stocking. It gave me the idea that both might be made in the same way. This was the seed-thought which later led to the invention of the knitting-machine."

Though this stocking, which was patented to him April 23, 1867, was destined to be made, in the course of some years, by many manufacturers, to be widely marketed, and to become known commercially as "the seamless stocking," it did not satisfy him, mainly because its heel did not fit perfectly, and, fearing it would not be salable, he laid it aside with the loom, which was the first circular knitting-machine capable in itself of producing a stocking without seams, having a rounded heel and toe.

Though he laid these inventions aside he did not abandon them. He knew how important they were, and looked hopefully forward to their development, to which he would have applied himself at once had he not exhausted his means. His western venture had cost him much; he had sold the rights in his geographies, mortgaged his home, and used the proceeds; and was a poor man.

On resigning the position of manager for Dr. J. C. Ayer & Co., he entered upon the most unsatisfactory period of his life, during which he sold his beautiful home in South Danvers at auction, and moved to Cambridge, Massachusetts, and, after a number of reverses, became nearly discouraged.

This period of nearly eight years, though so unsatisfactory, was not barren, but was productive of much that was highly creditable. He seldom referred to it; yet I sometimes think that during this period he best showed his uncommon attainments and extraordinary versatility, so many and so various were the kinds of work he did. He invented processes for making glue, gelatine, and

super-phosphate, two of which were successfully used by concerns with which he was connected; invented a process and apparatus for destroying the offensive gases of rendering establishments, which were used in factories at East Cambridge with the most gratifying results; and did some literary work, a portion of which was commercial.

He had literary talent in an artistic degree, and the stories, essays, sketches, and poems of his that have been preserved incline me to regret that his circumstances and duties were such he could not give more time to its cultivation. His humorous story of "Joab Quint," a poor simpleton, makes every reader laugh till his sides ache. His essay upon the "Slaughtering of Domestic Animals" was awarded the prize at the New England Agricultural Fair, at Lowell, in 1872, by the Massachusetts Society for the Prevention of Cruelty to Animals. His open letters to the press were always ably written, and his private as well as his business letters were frequently models of style.

I may be excused for including in these pages a few of his poems, though he shrank from the mention of them with deprecation, they were so far below his ideal.

FAREWELL TO SUMMER.

The leaves are falling, one by one;
The fruits are mellowing in the sun;
The birds are singing sadder lays; —
Farewell, farewell, bright summer days.

Our hopes are failing, one by one;
Our works are telling what we've done;
The castle grand is vapor gray; —
Farewell, farewell, bright summer's day.

HARVEST HOME.

When the woods are aflame with brilliant hues,
And the sun with a golden glow imbues
Whatever looms on the tremulous air ; —

When the dusty quakers drowsily fly
As the ponderous team moves slowly by,
And the gossamer floats in the ether rare ; —

When the apples are ripening in the sheen,
And the mellowing pumpkins shine between
The withering rows that leave them bare ; —

It is then sleepy nature simulates rest ;
And the farmer, with harvests plentifully blest,
The repose autumnal would dreamily share.

But to man was not given an annual rest ;
Unceasing activity was God's wise behest
To the lord of all in the earth and the air.

There are manifold duties beyond cropping the soil, —
In disposing the gains of requited toil, —
In benevolence to all assigned to our care ; —

In improving the mind, in refining the sense,
In learning to gratefully recompense
The Giver of Everything Good and Fair ; —

In preserving the germs for another year, —
In preparing ourselves for the heavenly sphere —
For the Harvest Home that awaits us there.

GROWING DARK.

'Tis growing dark, dear mother,
The room is very still ;
I now see angels, mother,
Coming down the hill.

They reach for me, dear mother.
To take me in the air ;
If you could go, too. mother,
I'd be so happy there.

And you will come, dear mother,
 And bring my brother dear,
 And father, too, dear mother;
 You must not leave them here.

I'm going, going, mother,
 One kiss, one kiss for me.
 The angels lift me, mother.
 I see,— I see,— I see —

OBACHICKQUID.

(It is an historical fact that the squaw of Obachickquid was carried off by Uncas, sachem of the Mohegans. Upon that incident the following verses are founded. Hobbamocko was the Indian name of the principal evil spirit. Kitchtan was God.)

When the night-winds
 With the shadows
 Filled the woodpaths,
 From his hunting
 Came all foot-tired
 To his wigwam,
 Obachickquid.

"Lulu!" called he:
 Came no answer.
 "Lulu!" cried he:
 Came no answer.
 "Lulu! hear me,
 Obachickquid!"
 Came no answer.

Dying fire was;
 Cold the pot hung;
 Gone the wolf-robe
 From the bed-place;
 Gone the necklace,
 Gone the moccasins:
 Left was silence.

Half the moon shone,
 Darkened hills half;
 Cold the dew fell;
 Far the wolf howled.

By his doorway,
 Gloomng, grieving,
 Obachickquid

Thought and asked he:—
 "Hobbamocko
 Evil whispered;
 Then she left me.
 Who the lover?
 Long he shall sleep
 On my wolf-robe!"

Brushed the grief-dews
 From his forehead;
 Bow and quiver,
 Axe and knife took.
 Through the woods went
 Swift as antlered—
 Obachickquid.

Out the moon went;
 Far the wolf slept;
 Soft the brooks ran;
 Low a fire glowed—
 Peering, crouching,
 Creeping, stealthy,
 Obachickquid.

By the fagots
 Indian sitting;
 From a bough hut,
 Sobbing, wailing.
 Broke the bow-string,
 Obachickquid!
 Gone was Uncas.

Then the thongs cut,
 Lulu kissed he;
 Turned his back then.
 Scorned her — left her.
 By the fire sat,
 With his head down,
 Obachickquid.

Near him Lulu,
 Hair in wild locks,
 Cheeks with tears wet,
 Red her eyes were;

Like the birch-tree,
 By the storm shook,
 Trembled deep she.

Spoke these words then:
 "Bend the lilies
 When the north wind
 Sweeps the vale through;
 Then to sunshine
 Turn their cups bright;
 Blast has touched not."

Tender hugged her,
 Gentle spoke he:—
 "Good was Kitchtan
 To protect you.
 Kiss me, Lulu,
 And forgive me;
 Wrong I did you."

From his wigwam
 Soon the smoke curled.
 Bright the fire blazed.
 Glad the pot sung;
 In the sunshine
 Spread the wolf-robe
 For his Lulu.
 Obachickquid.

"TRIUMPH AND FULNESS OF FAME."

When on a visit to Lowell early in 1876 he happened to meet his friend, Earl Amri Thissell, who had known him for years, and had always regarded the invention of the stocking and loom already referred to as a long step in the right direction. He told Mr. Thissell the melancholy circumstances to which he had been reduced; how he had been prevented from going on with the stocking and loom; that he had exhausted his means when he laid them aside, and that it had

cost all he had earned in one way and another since then to support his family. And he said, with visible emotion, "If I have any future, it is in that loom."

Mr. Thissell was not a rich man, but he had confidence in the ability of my father to develop these inventions, and in the outcome of their development, and offered him pecuniary assistance for an interest in them. This offer was gratefully accepted, and the work to which he had been hoping for years to be able to devote himself was begun at once.

I remember how his looks brightened the moment it occurred to him how he could perfect these inventions, so that the stocking would be faultless in shape and the loom capable of so producing it automatically. He had been sitting in a brown study in his parlor at Cambridge, when he suddenly raised his head, and, looking at me, exclaimed, "I have found out how to do it." The day on which this occurred was, I believe, one of the happiest days of his life.

Another loom, embodying the principles of the earlier one, and so ingenious as to seem "almost imbued with human intelligence," was constructed, and on it, in the summer of 1877, was produced what has since been known as the Shawknit Stocking, differing from the earlier one in having gussets in its heel and instep. This stocking, which was patented to him February 12, 1878, satisfied his ambition, which was to make the best-fitting stocking art could produce.

The loom, famous as the first Jacquard circular knitting machine, and the first machine to produce what is now commonly known as "the seamless stocking," and the first, and as yet the only, machine to produce a stocking having the structural features of the Shawknit, has been so often and so well described in public print as to

make even a partial description of its mode of operation seem almost supererogatory. After the ribbed top has been transferred to it, it knits the rest of a sock in the incredibly brief space of four and a half minutes. Having knit the leg, it changes automatically from circular to reciprocating motion, slows itself down to half-speed, introduces a splicing-thread, fashions the heel, cuts off the splicing-thread when it is no longer wanted, changes again to circular motion, resumes its original speed, and knits the foot. It then changes again to the back and fro motion, and fashions the toe, and then stops itself for the operator to transfer to it a new top and start it again. All that remains to be done to the stocking, by hand, is the closing of the hole at the toe and the taking of a few stitches at each side of the heel. From the time the ribbed top is put on until the toe is finished the loom is entirely automatic, and, with the exception of the needles and cylinder, it has little in common with other knitting-machines.

The stocking and loom perfected, it now remained for my father and his associate, Mr. Thissell, to interest capitalists in these inventions. For some weeks my father exhibited the loom in Lowell, where he had now come to reside, and in October, 1877, after a hard struggle, the

SHAW STOCKING COMPANY

was incorporated, with a capital of \$30,000, to build and operate the knitting-loom and manufacture the stocking invented by him, and he was chosen manager. The rapid growth of this industry under his management must be indicated in these pages by the simple statement that the company had, in 1877, a capital of \$30,000, and in 1878 operated eight looms, employing twenty-four persons, and that as early as 1879, and from time to time thereafter,

its capital was increased, and new looms and subsidiary machinery were added to its equipment, so that for some years before 1890, or before his decease, it had a capital of \$360,000, and operated two hundred and seventy-five looms, employing nearly five hundred persons.

In 1880, a desire to introduce the loom into England and Germany having been manifested by hosiery-makers in those countries, he visited Europe. He took the loom to London, patented it, and sold the right to manufacture under it to an English company for \$75,000. The loom made quite a sensation among the hosiery men of Leicester, for it had before required four or five different processes to complete a stocking; for instance, the ribbed top was made on one frame, the leg on another, the heel on another, the foot on still another, and each frame had to be worked by a different hand, trained to his own specialty.

The advance made by him was declared by an English trade journal of high repute, under date of June 24, 1881, "to be as greatly beyond the general practice in hosiery manufacture in our time as that of Lee was in his." It will be remembered that Lee was the inventor of the first stocking-frame.

In "Lowell Illustrated," an interesting volume by Frank P. Hill, librarian, published in 1884, the story of the exhibition of the loom at the Palace of Westminster, is felicitously told:

The English patent law is so framed as to allow a person to secure letters-patent on an invention of which he has merely heard, provided that within six months he file a complete description of the same. A piracy of the sort permitted by this peculiarity of the law was attempted in the case of Mr. Shaw's stocking-loom, and the hold which the "voyager" got upon the invention, through a

visit to the rooms on Broadway, and otherwise, was the thing the inventor was obliged to throw off before the loom could be offered in the foreign market.

It was during the legal contest which was waged over this piracy that the Lord Chancellor consented to the exhibition of the loom in his chambers at the Palace of Westminster, in order to compare it with the odds and ends and unorganized parts and devices which the opposing party had put in to illustrate the progress of the "invention" with him. It is to be presumed that His Lordship was misled by the small size and few parts put in by the adversary, as to the weight and proportions of the Shaw loom, and no opportunity was allowed him to make any discovery in that direction until he should be confronted with the machine in his own elegant apartments. The loom weighed about eight hundred pounds and occupied a floor space of two and one-half by five feet, and stood five and one-half feet high. The day and hour appointed found Mr. Shaw, with a large gang of English laborers, who exhaled the odors of the indispensable beverage, laboriously, yet tenderly, getting the loom up the "Peers' Staircase." This and the wainscoting were in the highest polish of white and colored marbles, and were such stairs as, leading to the hall of the House of Lords and to the offices of the highest law officers of the crown, one treads in stillness and with bare and reverent head. His Lordship had just passed along the corridor above, clad in his official wig and robes, and preceded by the officer who bears the mace and cries, "Make way for the Lord Chancellor," when a messenger to learn the whereabouts of the machine appeared at the head of the staircase. Some confusion arising, the attention of the chamberlain was attracted to the spot. He came in the uniform of his office, and what was his horror the ruddy English countenance tried but failed to show. "Stop right there!" he shouted. "Go back! Whatever are you about? You will spoil the whole building! Who are you? Whatever are you a-doing on down there? Oh, my!" By this time he had got down to the loom, in whose august presence he wiped the perspiration from his forehead. "You have chipped the stairs already, and I will have you arrested and lodged for damages." The situation was exciting and amusing. It was hard to reconcile the faithful chamberlain to the presence of the portentous machine. Let it go an inch farther he would not. He "cared nothing whatever for the Lord Chancel-

lor. The Lord Chancellor never intended it. He can come 'ere, but the machine mustn't go there." And there, half way up the "Peers' Staircase," it stood, until His Lordship and all the learned advocates and solicitors, in gowns and wigs, got ready to come down to see it. And there Mr. Shaw exhibited and explained it, himself, in true American fashion, turning the pulley. His exhibition lasted about half an hour, and many a playful remark was made by the gowns and wigs, and smiled at by the Lord Chancellor, about Yankee ingenuity, ascending to lightning and descending to stockings, etc., during this brief but important interval. The chamberlain, however, did not smile. He made wrinkles on his brow, and an assurance by the inventor that if the Parliament Houses were ruined he would send over new ones from America, having failed to pacify him, a dinner, not omitting what are known on the other side as "good things," was tried, and with the happiest results.

His success in England made more interesting the industry at Lowell, which became the subject of much gratifying newspaper comment, and a long notice in one of the Boston papers, January 17, 1885, began with these words:

The honor of being in the lead in the manufacture of superior hosiery certainly belongs to Massachusetts, and to Lowell in particular. Time was when Nottingham, Leicester, and other manufacturing centres in England, which had been for centuries engaged in making hosiery for the world, held the palm for superiority, but even Leicester has had to bow to Lowell in Massachusetts. This is to be attributed to the invention of the ingenious Shawknit stocking loom by Mr. Benjamin F. Shaw, of Lowell, a machine that has effected a thorough revolution in stocking knitting. When Mr. Shaw had perfected his machine in 1877, the work of constructing and operating it was undertaken by a company of capitalists, and the first machine unveiled to the public was exhibited at the fair of the Massachusetts Charitable Mechanics' Association in Boston in the autumn of 1878. Here it attracted much attention from both domestic and foreign manufacturers, and there were not wanting those who predicted that the machine would prove a failure; still, even those wedded to old-fashioned operations, either

by necessity or desire, saw more excellence in Mr. Shaw's invention than they were willing to admit. It may not be amiss to add, as illustrating the doubts with which this invention was received, that while the committee of the Mechanics' Charitable Association in 1878 awarded the Shaw Stocking Company a gold medal, the board of management of that association did not think the exhibitors of sufficient importance to be entitled to an invitation to the banquet which was tendered to the "principal exhibitors." Within two years after that, people from all parts of Europe were coming to see the loom, and riots were threatened in Leicester if the loom should be shown there.

How active he was during the years that he was manager of the Shaw Stocking Company!—doing work enough for the company, himself, and others to exhaust many ordinary men, if any number of such men could have done it at all. He was talented and had educated himself in the truest sense of the word. He had filled his mind with useful knowledge, and had developed by exercise its highest faculties. The Rev. Dr. Hervey, president of the College of Letters and Science, St. Lawrence University, who had known him for twenty-five years, said, in the address at his funeral, that he had "never seen a man so well informed that was not thoroughly educated in the schools." He was a clear and comprehensive thinker, a ready and able writer, and did the various work of these years easily—at least with no apparent effort. He was aided in some of it by the readiness with which he grasped legal principles, for he had much to do in the courts for the protection of his inventions.

I cannot, in these pages, review all that he did, during this busy period, that was indicative of the manner of man he was. His contributions to the Lowell papers (1883-1885) having reference to the Triple Thermic Motor, in which his detestation of fraud in whatever guise perhaps found its fullest and most forcible expression,

have not yet been forgotten. It is believed they were the direct means of saving many a person from the loss of his little accumulation of hard earnings. They were scientific, sarcastic, and ludicrous, and one of them, entitled "The Hodjum, Codjum, and Dodjum Company," an amusing allegory in which the intelligent reader found much between the lines, was recently published in the *Lowell Morning Mail* at the suggestion of a clergyman, who called it "the most prophetic utterance he ever read, as interpreted in the light of subsequent events."

He was a firm believer in a protective tariff, and was active in the defeat of the Mills bill, which he opposed with all the persistence of his indomitable nature. His luminous letters to the press against this measure, some of which were controversial, were widely copied and as widely commented upon, and he became known throughout the country, not only as a believer in the preservation of the American market for the American manufacturer, and in the identity of interest between the employer and the employed in the economic question under discussion, but as one that had "carefully mastered the principles of political economy." His letter to the Honorable R. Q. Mills, chairman of the congressional Committee on Ways and Means, dated April 3, 1888, which he caused to be published, and which the *Boston Journal* pronounced "an unanswerable refutation of the idea of the free traders," became a campaign document. Unable to refute his arguments, the editors of free trade papers generally threw stones. One of them said: "It is the continued plethoric condition of his pocket-book that he has in view, in laboring for the maintenance of the tariff which enhances the price of his goods, and not the material interests of his employes in the least." But what did he say in the closing paragraphs of one of his

letters, which was indicative of the interest he felt in our wage-earners? He said this: "This economic question is one affecting every person living in this country, and this thought occurred to me when I read a paragraph in a former issue, in which you said that 'all persons interested in the tariff' should read an article that I had sent you. 'Why,' said I, 'who is not interested in the settlement of a question that has arisen, whose settlement involves either the prosperity or the ruin of all but the rich who live by grinding down the masses?' They talk about contributing to the wealth of the capitalists and corporations, and they say that all sorts of manufactured goods should be admitted free. They ignore the fact that all the money that goes abroad for imported goods, goes to capitalists, who for generations have inherited wealth, and who exercise arbitrary, irresponsible control over the lives of thousands of poor and dependent people, who are born upon their soil, and kept in such a condition of servitude and poverty as prevents them from ever leaving it. There is nothing more repugnant to humanity than the condition of life in which the manufacturing operatives abroad are kept. And yet, for the support of those foreigners who have inherited their factories, and for the support of that system of servitude which has resulted in the moral degradation, physical deformity, poverty and ignorance of the thousands of operatives in England and in Germany, they advocate the stopping of the mills in this country, and the sending abroad of our money!

"The question, then, is really this: 'Shall we contribute to the support of our own working people or to the maintenance of the inherited, despotic, and inhuman capitalists abroad?' A vote for free trade is a vote to enrich those who profit by the helplessness of the worthy

workers in Germany, England, and France, where it is considered 'a crime to be born poor.'"

The Mills bill was defeated; the McKinley bill, in some of the details of which he had a hand, was passed; American manufacturers were given protection, and the Home Market Club passed these resolutions on his death:

Resolved, That by the death of Mr. Benjamin Franklin Shaw, which occurred at his residence in Lowell, December 11, 1890, the Home Market Club lost one of its most esteemed officials. He was a public benefactor, not only as an inventor and the founder and manager of a successful business, but as an intelligent and influential advocate of sound national policy. The work of such a man survives him. Esteemed in life, he has been more truly revealed by death, so it may be said of our appreciation, not less than of the grief of near friends, that

"Time but th' impression deeper makes
As streams their channels deeper wear."

He undertook during these years to bring about a better system of patent laws, and, during the interval between 1884 and 1889, invented the Shaw-woven loom and stocking, which were fairly well described in the *Lowell Vox Populi* of April 27, 1889, and elicited the following open letter from a well-known mechanical expert:

Editor Vox Populi:—The exhibition of some stockings from a new circular automatic knitting-loom, invented by Benjamin F. Shaw, of the Shaw Stocking Company, of this city, deserves a more extended notice than was given it in a former issue of your paper. There is nothing wonderful in a striped stocking as such; but there is a great deal that is wonderful in a seamless stocking, having a plain sole and a striped upper, or vice versa, with a series of in-woven figures resembling embroidery running along the sides, when that stocking is the product of a single circular machine, which is automatic in all its movements, and which requires only to be supplied with yarn and connected with power to turn it out. Mr. Shaw has invented a wonderful machine, a machine which will be conspicuous among the marvelous

inventions of this age of mechanical progress. Such a machine is not the product of mere ingenuity, but of inventive genius — of ideality, or the creative faculty. Mr. Shaw may be associated with such inventors as Lee and Jacquard, men who were really inspired for the performance of their work. The improvements he has made in knitting machinery are not limited to simple modifications of long-used parts. He has conceived new articles of dress of complex structure, and created new organisms with which to construct them. He has covered very broad ground. His breadth is like that of the musician who, beyond writing a mere tune, composes a symphony. Our citizens, from living at the scene of this achievement, will be unable to form a just estimate of its importance. Whose next-door neighbor ever does anything of any great account? Seen from a distance, whence this invention may be viewed without envy, in its relation to the history and state of the art, the work of Mr. Shaw will appear like a mountain in a hilly plain. Wonder and admiration on the part of foreign manufacturers may be predicted when this loom shall come to their knowledge.

IRA LEONARD.

LOWELL, April 22, 1889.

These inventions were not patented until after his decease, nor was the stocking marketed until then. And during these years he gave some time and much thought to the development of his beautiful summer retreat, Ossipee Mt. Park, of which more will be said.

Though so busy, he found time to interest himself in the welfare of his employes, so that the most pleasant and cordial relations existed between him and them. Having regard for their health, their morals, and their general prosperity, he treated them more like a parent than an employer, and he said at one of a series of literary and musical entertainments which were given them at his suggestion that "the employers and employes of the company are all brothers and sisters, members of one family, so far as the relationship of brothers and sisters can exist among people not born in the same family."

It was his wish to make the conditions of work the best that are possible, and these entertainments, by which his employes were not only diverted, but assured that an interest was felt in them beyond what is merely of a monetary nature, were a means to this end, and as such were widely commented upon by the press. They were delightful occasions, and a newspaper report of one of them ran in part as follows:

Shortly before eight o'clock the pink-tinted electric lights in Huntington Hall, the largest assembly room in Lowell, shone down on an animated scene, which resembled nothing so much as the closing exercises in a female college, for a large majority of the four or five hundred employes are young women. The floor was handsomely decorated with blossoming flowers in pots and tropical plants, while the employes were each provided with a floral favor. The boxes adjoining the stage were occupied by members of the corporation and their families, while the galleries were devoted to their guests. At the opening hour a grand promenade was indulged in by the employes, in which Mr. and Mrs. Shaw joined. The appearance of these hundreds of employes promenading in the brilliantly lighted hall in silks and satins and muslins made in the latest fashions, their faces aglow with pleasurable excitement, was one that might well cause a feeling of pride in the breast of an American who takes the least interest in the progress of his country.

Considerate, generous, and sympathetic in his treatment of his employes, it is no wonder that they esteemed him; no wonder that they placed on his casket a floral tribute bearing this inscription:

IN MEMORIAM.

BENJAMIN F. SHAW.

A Beloved Employer,

And turned away from his blanched face with heavy hearts and tearful eyes.

His interest in the two orphans, Mamie and Lizzie Cole, children of the noble Boatswain Jack Cole, who died in the Washington Naval Hospital from the effects of exposure in the Arctic expedition of the ill-fated Jeannette, was an illustration of his benevolence. He had read of the nearly destitute condition in which they were living in Brooklyn, in a notice in the *New York World*, and sent them money as a gift, and offered them employment. They came to Lowell, and he cared for them with all the tenderness of a parent. He gave them work, acquainted the public with the details of their sad experience, raised money for them, and aided them in undertaking to secure from the national government funds that were due to them. He took them in summer to his home at the mountains, where they enjoyed long sojourns; and he was as glad to see them grow rugged and rosy-cheeked in the mountain air as if they had been children of his own. There were no sincerer mourners at his funeral than they, who had said in the hushed stillness of his house on the day of his death that "he had been as a father to them both." The public knew but little of his many acts of kindness and charity. He sought no reward but the satisfaction of his own conscience in doing good for others.

"Into your heavenly loneliness
Ye welcomed me, O solemn peaks!
And me in every guest you bless
Who reverently your mystery seeks."

In the summer of 1879 my father passed some days with his wife and daughters at a farm-house in Tuftonborough, New Hampshire, and at the suggestion of his host, who led the way, visited the famous Ossipee Falls, in Moultonborough, New Hampshire, now quite as well known by the name of "Falls of Song," and clambered

from them through the tangled woods to a quaint, weather-beaten cottage, from which he looked far down on the peaceful valley and waters of Winnepesaukee. His delight in the Falls and the prospect was greater than his companion had thought it would be, who had not learned with what a loving eye, with what poetic sentiment, he viewed the beauties of nature. That this delight was not simulated in the least, his companion saw not long after.

In the course of a few weeks he visited the Falls again, traced the brook of which they are a part to its source, viewed the lake again from the cottage, and in the autumn of 1879 rejoiced to say that he owned the Falls, much of the brook, and the site of the cottage, having bought nearly five hundred acres containing them.* In the purchase of this land he came into possession of a natural park, which he called Ossipee Mt. Park, and made his summer home, and which he so well developed, and so generously permitted many others to enjoy, that it has been called "a monument to his good taste and public spirit."

It is not my purpose to describe it in these pages; but I cannot resist the temptation to present in this connection a portion of an open letter by Professor Fay of Tufts College, who called the park "a New England paradise," and said "we insist again that the half-recognized presence of a presiding genius is essential to any real paradise. Here it has done much to render all the charms of this rare spot accessible, and to develop new beauties.

* The farmers of whom this land was bought had been, with respect to the charms of their locality, like the brown bear of Whittier, "blind and dull." They were surprised at the sudden demand for the acres they owned, and felt that the opportunity of their lives had come. One of them, as soon as he had disposed of his farm, bought a new suit of clothes, a new hat, and a very elaborate watch-chain, which most people said was either gold or brass, and promised himself a period of long-needed rest; and this promise was fulfilled.

With such discretion has this been done, with such art, as not merely not to be obtrusive, but often actually to conceal itself. An opening in the trees beyond the unbroken lawn is a hint of where the path begins which leads by the easiest or most attractive ways to the rocky 'Knoll,' the ledgy 'Steep,' into the depths of the ravine, to the foot of the highest waterfall, then back along the matchless brook, which you cross by many a rustic bridge. Here and there a side path invites you by a shorter cut to some one of the principal features of this delightful park. As you stray along the path you now and then see, at a little distance beyond you, a seat suggesting a tarry, but you see no reason why it should be just there. You reach it, and sit down half-involuntarily. Immediately you are looking through a vista in the trees upon a bit of distant landscape almost too idyllic to be a part of Puritan New England. Perhaps a slight turn of the head reveals a glimpse through the thinned underbrush of a foaming cascade coquetting down the dark, mossy cliff. If it would offend you to know that Nature no more prepared the vista and carefully pruned away the screening shrubbery than she placed the rustic seat, we will leave you to your illusion. Nevertheless, when we meet in the prosy, work-a-day world, I know that you will be first to speak of the thousands of dollars spent by the owner of this domain in making it what it is to-day—a spot unparalleled in all New England."

In March, 1882, the people of Moultonborough, in town meeting assembled, named the highest peak of the Ossipee Range Mt. Shaw, in his honor, by which name it has since been officially known, and on the Fourth of July, 1882, to signify his appreciation of the compliment they had paid him, he invited them—all the people of Moultonborough—to the park, where they were enter-

tained with suitable musical and literary exercises, in which the most prominent of them participated. On this occasion he read an original poem, which perhaps he would not have mentioned were he living, but which in many of its passages was highly poetical.

How delightful were the days he passed here, in over-seeing the work of cutting a path, building a bridge, or opening a vista, or in communing with nature and reaping

“The harvest of a quiet eye.”

His desire to have his friends enjoy his romantic retreat, and the cordiality with which he invited them to it, were enough to show that in his heart was the sentiment so well expressed by Lucy Larcom in the poem beginning:

“I said it in the meadow-path,
I say it on the mountain-stairs: —
The best things any mortal hath
Are those which every mortal shares.”

Here he entertained John Greenleaf Whittier, Lucy Larcom, Irene Jerome, and other noted persons whose refinement of thought and feeling made their presence congenial. Mr. Whittier wrote to him: “Surely there is nothing in all New England mountains to compare with thy place.”

Ossipee Mt. Park was, indeed, an idyllic home, and he hoped to watch at it, in old age, the growing and the falling of the leaf; but, alas! on the 24th day of November, 1890, he was carried from it in an enfeebled condition after a painful sickness of four weeks, which he had uncomplainingly endured, to his home in Lowell, where he soon suffered a relapse, and on the 11th day of December, 1890, at the age of 58 years, departed this life. He died strong in the faith that the soul is immortal and God is good, and his last words, uttered slowly and with difficulty, were these: —

“I feel all the solemnity of what is now presented to my mind. I have been expecting this, but its suddenness surprises me.”

His life was in the main a struggle. How well he lived it, how useful he made himself, how much he accomplished, how much good he did, these pages but imperfectly show, while they afford hardly more than a glimpse of the man himself.

They fail to do justice to his beloved memory and the feelings to which the thought of him gives rise in my heart. I do not think of him as an inventor nor as a public benefactor, but as the man “so jovial and so full of kindness,” so nice in his tastes, so simple in his manners, so witty, so companionable, and so strong withal that he was liked by everybody that came to know him intimately. His relish of fun and his ability to make it will never be forgotten by those that gathered about his hearth or were in friendly correspondence with him. I have seen many laugh at his witty and humorous speeches, his comical looks and actions, till they could laugh no longer from sheer exhaustion.

He was one of the best entertainers, and there is a passage in a description of Thackeray that applies so well to him that I am going to avail myself of it: When one was “taken into his confidence, no friend could be more jovial or unrestrained than he was. The simplicity of the man was one of his greatest charms. He could not endure affectations and mannerisms. He talked without effort, without hesitation, and without any of the elaborateness which comes of egotistic cogitation and the desire to present oneself in the most favorable light. He was one of the most ‘natural’ of men, if the word is taken as meaning the absence of self-disguise.” An editor who had enjoyed his hospitality at his mountain home only a

few weeks before he died, impressed by the heartiness of his manners and the interest he gave to conversation, said in a tribute to his memory: "Hearty, sturdy, with a grasp that told of strength and a face that beamed with health, my host bade me farewell and come again. I cannot say I ever met a host so genial, and I rejoiced in the opportunity my visit afforded me to see the sentimental side of a man whose life was spent in practical pursuits. I found a mind well stored with literary information, a mind which cherished intimate communion with the poets, and a nature that found Nature something more than sublime. Up among the peaks of his mountain home he found his most perfect content, and every hour brought him fresh delights in new revelations and ever-changing phases."

He went abroad on business; but he travelled there with the curiosity, discernment, and feeling of a poet and artist. This is shown by his letters to members of his family, giving his impressions of what he saw that was picturesque or had literary or historical interest. These letters are so characteristic, as well as delightful, that I wish I could include them in these pages.

It has been truly said, in the tributes to his memory, that "he was one of the best types of New England cultivation;" that "he was a hale, hearty, and vigorous man, a warm and generous friend;" that "he had a spirit of wit, a hopeful and joyful spirit, liked the sunny side of life, and occasioned vivacity in those about him;" that "he was a man of positive convictions, as all great men are;" and "had no sympathy with anything unfair, unjust, or mean;" that "he was a man of extraordinary resources and indomitable courage;" that "he was a public-spirited man, and one that kept himself constantly informed of what was going on in the world;" that "he

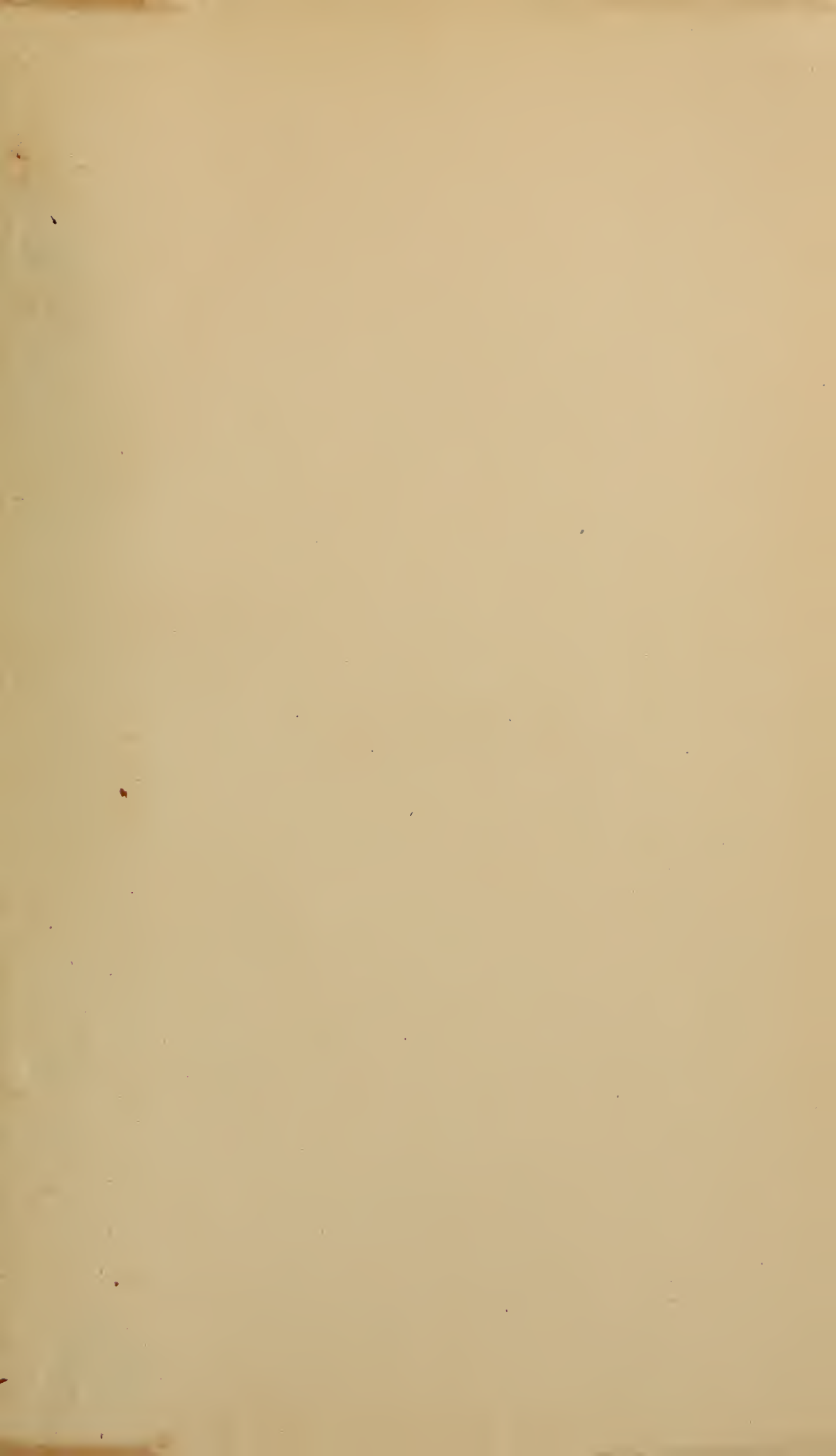
was not only an extensive reader, but an intelligent one," and that "whenever any opinion was expressed contrary to his conviction or knowledge of the facts, his ready pen was brought into requisition to refute the statement;" that "he was emphatically a man of enterprise and push," and that "eminently a self-made man, winning his way to material prosperity by the exercise of his natural genius, he knew how to appreciate all that he had won, and was never so happy as when he made those happy around him."

And it is gratifying to me to know that his good "name will have place among the inventors who have done so much to adorn the annals of a generation with their bloodless achievements in the fields of science and mechanical research."

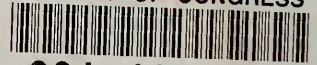
I loved him and was justly proud of him. I can hardly realize that he is not living, and find myself at times waiting

"For the touch of a vanished hand,
And the sound of a voice that is still."

He was laid at rest in the Lowell Cemetery.



LIBRARY OF CONGRESS



0 021 183 876 0